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least one of the plurality of internal bearing members;

providing a second securing element within the cavity of the shell member, the second securing element having a second securing structure compatible with the securement characteristics of at least another of the plurality of internal bearing members; and

selecting the one or the another of the internal bearing members and securing the selected internal bearing member within the shell member by engaging the selected internal bearing member with the corresponding first securing element or second securing element for completion of the acetabular cup assembly interoperatively.

REMARKS

Favorable reconsideration is respectfully requested in view of the above amendments and the following discussion.

Applicants wish to thank the Examiner for the courtesy of granting a personal interview with their attorney on December 20, 2001. The substance of the interview is summarized in the Interview Summary entered on that date.

Claims 1 through 19 have been rejected under 35 U.S.C. § 112 as being indefinite. The claims have been amended to obviate the rejection. In particular, amendments within lines 18 through 25 of claim 1 now point out more clearly that the external receptor

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element and the internal receptor element have interengagable structures compatible with the securement characteristics of the selected bearing member, so that the selected bearing member is secured to the securing member, enabling securement of the bearing member within the shell member by engagement of the external securing element of the metallic securing member with the internal securing element of the shell member, all as more fully described in the specification, at page 14, line 7, through page 15, line 2. With respect to the subject matter in lines 32 through 36 of claim 1, the claim now points out that contact between the neck member of the femoral component and the lower end of the securing member precludes deleterious impingement of any portion of the femoral component distal of the head member upon the bearing member. Thus, while the head member is engaged with the bearing member, portions of the femoral component distal of the head member cannot impinge deleteriously upon the bearing member.

Claims 1 through 6, 9 through 12 and 14 through 17 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over EP 0773007A1. While the reference does illustrate a shell member, a bearing member and a securing member for securing the bearing member in the shell member, there is no illustration or description in the reference which suggests anything other than that upon assembly of the three members the lower end of the bearing member

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is susceptible to contact with a portion of a femoral component distal of the head member of the femoral component engaged within the bearing member. In contradistinction, the subject matter of the present claims includes a construction in which the lower end of the bearing member is spaced upwardly from the lower end of the securing member a prescribed distance which precludes deleterious impingement of any portion of the femoral component distal of the head member upon the bearing member. Accordingly, the disclosure in EP 0773007A1 neither anticipates nor renders obvious the subject matter of the present claims and the rejection should be withdrawn.

With respect to the rejection of claims 7, 8, 13, 18 and 19, on the basis of the disclosure of EP 0773007A1 in view of one or more of EP 554214A1, Lopez et al. (6,129,765) and Oueveau et al., none of the supplemental references discloses or teaches any construction which would modify the structure of EP 0773007A1 to include an arrangement wherein the lower end of the bearing member is spaced upwardly from the lower end of the of the securing member a prescribed distance to preclude deleterious impingement of any portion of the femoral component distal of the head member upon the bearing member. Hence, the proposed combinations of references are untenable in rendering obvious the subject matter of these claims and the rejection should be withdrawn.

Claims 20 through 25 have been rejected under 35 U.S.C. §

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102(e) as being anticipated by Lopez et al. (5,938,702). Lopez et al. discloses a polyethylene bearing secured within an acetabular shell member by a single securing mechanism, namely, a protrusion 78 on the bearing engaged within a groove 79 in the shell. The reference neither illustrates nor suggests anything other than the securement of a polymeric bearing in a shell member. The subject matter of present claims 20 through 25 includes an arrangement in which any one of a plurality of bearing members having different characteristics, including different securement characteristics, can be selected for interoperative securement within a single shell member having securing mechanisms which can accommodate any selected one of the plurality of available bearing members. The reference is totally silent with respect to any construction which is directed toward that end or which could accomplish that end. Hence, the reference neither anticipates nor renders obvious the subject matter of these claims and the rejection should be withdrawn.

Claim 26 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Lopez et al. (5,938,702) in view of Pappas et al. Both of these references disclose devices in which a shell and a bearing are constructed with a single securing mechanism enabling a bearing having a particular construction to be secured within the shell. In contradistinction, the subject matter of claim 26

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includes an arrangement in which any one of a plurality of bearing members having different characteristics, including different securement characteristics, can be selected for interoperative securement within a single shell member having securing mechanisms which can accommodate any selected one of the plurality of available bearing members. The references are totally silent with respect to any construction which is directed toward that end or which could accomplish that end. Hence, the references neither anticipate nor render obvious the subject matter of this claim and the rejection should be withdrawn.

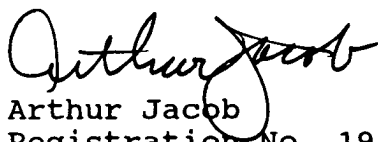
Claims 27 through 34 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Lopez et al. (5,938,702). The shortcomings of the reference in suggesting an arrangement in which a shell member is provided with securing mechanisms which can accommodate any selected one of a plurality of available bearing members having different securement characteristics have been discussed fully above. The present claims all include subject matter providing structural relationships or steps enabling the choice of a particular bearing member, selected from a plurality of bearing members having different characteristics, for securement within a single shell member which accommodates any one of the selected bearing members. The reference discloses no structure or method which can anticipate or render obvious the subject matter of

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these claims. Accordingly, the rejection should be withdrawn.

It is respectfully submitted that the claims comply fully with 35 U.S.C. § 112, and set forth subject matter which is neither anticipated nor rendered obvious by the references. It is respectfully requested that the claims be allowed and the application be passed to issue.

Respectfully submitted,



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1/25/02

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MARKED-UP VERSION OF AMENDED CLAIMS

1(amended). An acetabular cup assembly for receiving a proximal end of a femoral component of a prosthetic hip implant, the femoral component including a head member and a neck member depending from the head member in a distal direction, the acetabular cup assembly having an external shell member with an internal cavity, and an internal bearing member for securement within the cavity to receive the head member of the femoral component for rotational movement within the bearing member, the internal bearing member being selected from a plurality of bearing members having different characteristics, including different securement characteristics, such that the acetabular cup assembly selectively is provided with characteristics corresponding to the characteristics of the selected internal bearing member the acetabular cup assembly comprising:

a metallic securing member for reception within the cavity of the [acetabular] shell member, the securing member extending between an upper end and a lower end and including an external securing element and an internal receptor element;

an external receptor element on the bearing member, the external receptor element and the internal receptor element [being] having interengagable structures compatible with [particular] the

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securement characteristics of the selected bearing member such that upon engagement of the external receptor element with the internal receptor element the internal bearing member is secured to the securing member with the lower end of the bearing member spaced upwardly a prescribed distance from the lower end of the securing member; and

an internal securing element within the cavity of the shell member, the internal securing element being essentially complementary to the external securing element of the securing member such that upon selective engagement of the external securing element with the internal securing element the securing member is secured selectively within the shell member;

the prescribed distance between the lower end of the bearing member and the lower end of the securing member being such that contact between the neck member of the femoral component and the lower end of the securing member precludes deleterious impingement of any portion of the femoral component distal of the head member upon the bearing member.

20(amended). A shell member for use in an acetabular cup assembly having an internal bearing member for selective securement within the shell member interoperatively, the internal bearing

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member being selected from a plurality of bearing members having different characteristics, including different securement characteristics, such that the acetabular cup assembly selectively is provided with characteristics corresponding to the characteristics of the selected internal bearing member, the shell member comprising:

an internal cavity;

a first securing element within the cavity of the shell member, the first securing element [being] having a first securing structure compatible with the [securing] securement characteristics of at least one of the plurality of internal bearing members; and

a second securing element within the cavity of the shell member, the second securing element [being] having a second securing structure compatible with the [securing] securement characteristics of at least another of the plurality of internal bearing members;

the first and second securing [elements] structures being juxtaposed with one another and placed at relative locations such that the effectiveness of each of the first and second securing elements is maintained while in the presence of the other of the first and second securing elements, whereby the one and the another of the internal bearing members each is selectable for effective

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selective securement within the shell member to complete the acetabular cup assembly interoperatively.

26(amended). The invention of claim 25 wherein the bearing member includes an upper end and a lower end spaced in an axial direction [form] from the upper end, and the rib includes a cross-sectional profile contour configuration having an upper section confronting the upper end of the bearing member, a lower section confronting the lower end of the bearing member, and an intermediate section between the upper and lower sections, the upper section making a first acute angle with the axial direction, the lower section making an obtuse angle with the axial direction, and the intermediate section making a second acute angle with the axial direction, the second acute angle being smaller than the first acute angle so [a] as to establish tapered surfaces along the upper and intermediate sections for facilitating engagement of the rib within the recess, and a locking surface along the lower section for retaining the rib within the recess, while providing the rib with resistance to shearing from the bearing member.

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27(amended). A kit of component parts for assembling an acetabular cup assembly having an internal bearing member for selective securement [secured] within a shell member interoperatively, the kit comprising:

a plurality of bearing members having different characteristics, including different securement characteristics, such that the acetabular cup assembly selectively is provided with characteristics corresponding to the characteristics of a selected one of the internal bearing members;

the shell member comprising:

an internal cavity;

a first securing element within the cavity of the shell member, the first securing element [being] having a first securing structure compatible with the [securing] securement characteristics of at least one of the plurality of internal bearing members; and

a second securing element within the cavity of the shell member, the second securing element [being] having a second securing structure compatible with the [securing] securement characteristics of at least another of the plurality of internal bearing members;

the first and second securing elements being juxtaposed with one another and placed at relative locations such that the effectiveness of each of the first and second securing elements is

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maintained while in the presence of the other of the first and second securing elements, whereby the one and the another of the internal bearing members each is selectable for effective selective securement within the shell member as the selected one bearing member to complete the acetabular cup assembly interoperatively.

33(amended). An improvement in a method for implanting an acetabular cup assembly having an external shell member with an internal cavity, and an internal bearing member for securement within the cavity interoperatively, the internal bearing member being selected from a plurality of bearing members having different characteristics, including different securement characteristics, such that the acetabular cup assembly selectively is provided with characteristics corresponding to the characteristics of the selected internal bearing member, the improvement comprising the steps of:

providing a first securing element within the cavity of the shell member, the first securing element [being] having a first securing structure compatible with the [securing] securement characteristics of at least one of the plurality of internal bearing members;

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providing a second securing element within the cavity of the shell member, the second securing element [being] having a second securing structure compatible with the [securing] securement characteristics of at least another of the plurality of internal bearing members; and

selecting the one or the another of the internal bearing members and securing the selected internal bearing member within the shell member by engaging the selected internal bearing member with the corresponding first securing element or second securing element for completion of the acetabular cup assembly interoperatively.